Baskar, P. 101677980

10/677980

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STRUCTURE FILE UPDATES: 21 NOV 2005 HIGHEST RN 868586-21-4 DICTIONARY FILE UPDATES: 21 NOV 2005 HIGHEST RN 868586-21-4

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http://www.cas.org/ONLINE/UG/regprops.html

- key terms

E GLYCOPHORIN A/CN 5 L1 27 S GLYCOPHORIN A ?/CN E BAEBL/CN 5

E FORMAMIDE/CN 5

L8 1 S E3

8 S ("QS-21" OR "DETOX-PC" OR "MPL-SE" OR "MOGM-CSF" OR "TITE L1311 S (QS 21 OR DETOX-PC OR MOGM CSF OR TITERMAX G OR CRL 1005 L141 S DETOX PC/CN L15 E MOGM/CN 1 S GCMAF/CN L16 E TITERMAX/CN 5 2 S E3-4 L17 E "B-ALETHINE"/CN 5 E "B-ALETHINE"/CN 5 L18 1 S E3 L19 19 S L13 OR L14 OR L15 OR L16 OR L17 OR L18

L23	1 S PSC 97B/CN E GERBU/CN
L24	4 S GERBU ?/CN
	E "GM-CSF"/CN 5
L28	9 S "GM-CSF"?/CN

FILE 'HCAPLUS' ENTERED AT 15:50:06 ON 22 NOV 2005
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FILE COVERS 1907 - 22 Nov 2005 VOL 143 ISS 22 FILE LAST UPDATED: 21 Nov 2005 (20051121/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

L1 L2 L3	12304	SEA FILE=REGISTRY ABB=ON PLU=ON GLYCOPHORIN A ?/CN SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR BAEBL OR ERYTHROCYT? BIND? OR GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR (EBA175 OR EBA OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR GLYCO CONNECTIN OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTE IN OR GLYCO PROTEIN) OR SIALOGLYCO PROTEIN SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND (PLASMODIUM OR
L7		P) (W) FALCIPARUM SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND FORMAMIDE
11/		
L1	27	SEA FILE=REGISTRY ABB=ON PLU=ON GLYCOPHORIN A ?/CN
L2		SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR BAEBL OR ERYTHROCYT? BIND? OR GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR (EBA175 OR EBA OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR GLYCO CONNECTIN OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTE IN OR GLYCO PROTEIN) OR SIALOGLYCO PROTEIN
L3		SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND (PLASMODIUM OR P) (W) FALCIPARUM
L13	8	SEA FILE=REGISTRY ABB=ON PLU=ON ("QS-21" OR "DETOX-PC" OR "MPL-SE" OR "MOGM-CSF" OR "TITERMAX-G" OR "CRL-1005" OR GERBU OR TERAMIDE OR PSC97B OR ADJUMER OR "PG-026" OR "GSK-1" OR GCMAF OR "B-ALETHINE" OR "MPC-026" OR ADJUVAX OR CPG ODN OR BETAFECTIN OR ALUM OR MF59)/CN
L14	11	SEA FILE=REGISTRY ABB=ON PLU=ON (QS 21 OR DETOX-PC OR MOGM CSF OR TITERMAX G OR CRL 1005 OR PSC 97B OR ADJUMER OR PG 026 OR GSK 1 OR B ALETHINE OR MPC 026 OR BETAFECTIN OR ALUM OR MF 59)/CN

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L16
              2 SEA FILE=REGISTRY ABB=ON PLU=ON (TITERMAX/CN OR "TITERMAX
L17
                 GOLD"/CN)
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L18
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L19
                OR L17 OR L18
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              4 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND L29
L30
L32
             4 L7 OR L30
L32 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
     Entered STN: 11 Oct 2002
                          2002:777627 HCAPLUS
ACCESSION NUMBER:
                          137:293522
DOCUMENT NUMBER:
TITLE:
                          Plasmodium falciparum
                          erythrocyte binding protein
                          BAEBL for use as vaccine against malarial
                          Plasmodium parasite
                          Mayer, Ghislaine; Miller, Louis H.
INVENTOR(S):
                          The Government of the United States of America,
PATENT ASSIGNEE(S):
                          Represented by the Secretary, Department of Health
                          and Human Services, USA
                          PCT Int. Appl., 57 pp.
SOURCE:
                          CODEN: PIXXD2
DOCUMENT TYPE:
                          Patent
LANGUAGE:
                          English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                            APPLICATION NO.
                        KIND DATE
                                                                      DATE
     PATENT NO.
                                             _____
                                                                      _____
                          ____
     WO 2002078603
                         A2 20021010
A3 20030828
                                                                      20020329
                                            WO 2002-US10071
                                 20021010
     WO 2002078603
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
             LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ,
             NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ,
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG,
             CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                      A1 20051027 US 2003-677980
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US 2001-281130P

20031002

P 20010402

US 2005239730

PRIORITY APPLN. INFO.:

WO 2002-US10071 A1 20020329

```
AB
    The invention relates to Plasmodium falciparum
    Erythrocyte Binding Protein BAEBL for use
     as a vaccine.
     83869-56-1, GM-CSF
IT
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (MoGM-CSF; Plasmodium falciparum
        erythrocyte binding protein BAEBL for
        use as vaccine against malarial Plasmodium parasite)
IT
     646-08-2, \beta -Alethine
     9051-97-2, Adjuvax 141256-04-4, QS
     -21 152521-52-3, Betafectin
     172889-84-8, MF59 213018-95-2,
     GERBU vaccine adjuvant 263746-33-4, Adjumer
     263746-52-7, Detox-PC 263746-55-0
     , GSK-1 263746-77-6, PG-
     026 263757-02-4, GcMAF 263757-05-7
     , MPC-026 263757-16-0, MPL-
     SE 467423-50-3, TERamide
     467423-52-5, PSC 97B
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (Plasmodium falciparum erythrocyte
        binding protein BAEBL for use as vaccine against
        malarial Plasmodium parasite)
ΙT
     106392-12-5, CRL-1005
     RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL
     (Biological study); USES (Uses)
        (TiterMax-Gold; Plasmodium falciparum
        erythrocyte binding protein BAEBL for
        use as vaccine against malarial Plasmodium parasite)
L32 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN
     Entered STN: 31 Aug 2001
                         2001:635921 HCAPLUS
ACCESSION NUMBER:
                         135:200402
DOCUMENT NUMBER:
                         Novel method for down-regulation of amyloid
TITLE:
                         Birk, Peter; Jensen, Martin Roland; Nielsen, Klaus
INVENTOR(S):
                         Gregorius
                         M & E Biotech A/S, Den.
PATENT ASSIGNEE(S):
                         PCT Int. Appl., 120 pp.
SOURCE:
                         CODEN: PIXXD2
DOCUMENT TYPE:
                         Patent
                         English
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
                                DATE
                                           APPLICATION NO.
                                                                    DATE
     PATENT NO.
                         KIND
     WO
     WO
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                                                                     20010219
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                                             AU 2001-33620
                                                                      20010219
    AU 2001033620
                          A5
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    BR 2001008566
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                          A2
                                 20021127
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                                 20051019
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                                 20031215
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                                            EP 2002-700174
                                 20031126
                                                                      20020219
     EP 1363664
                          A2
            AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     JP 2004529881
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                                             JP 2002-565614
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                                 20050324
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                                             ZA 2002-4830
                                                                      20020614
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                                 20030915
                                             US 2002-204362
                                                                      20020816
                          A1
                                 20030508
    US 2003086938
                                 20020820
                                             NO 2002-3961
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                          Α
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                                                                  A 20000221
PRIORITY APPLN. INFO.:
                                             US 2000-186295P
                                                                     20000301
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                                             WO 2001-DK113
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                                                                  Α
                                                                     20010820
                                             US 2001-337543P
                                                                      20011022
                                                                  Р
                                             WO 2002-DK112
                                                                  W
                                                                     20020219
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AB Disclosed are novel methods for combating diseases characterized by deposition of amyloid. The methods generally rely on immunization against amyloidogenic proteins (proteins contributing to formation of amyloid) such as beta amyloid (A $\beta$ ). Immunization is preferably effected by administration of analogs of autologous amyloidogenic

polypeptides, said analogs being capable of inducing antibody production against the autologous amyloidogenic polypeptides. Especially preferred as an immunogen is autologous  $A\beta$  which has been modified by introduction of one single or a few foreign, immunodominant and promiscuous T-cell epitopes while substantially preserving the majority of Aβ's B-cell epitopes. Also disclosed are nucleic acid vaccination against amyloidogenic polypeptides and vaccination using live vaccines as well as methods and means useful for the vaccination. Such methods and means include methods for identification of useful immunogenic analogs of the amyloidogenic proteins, methods for the preparation of analogs and pharmaceutical formulations, as well as nucleic acid fragments, vectors, transformed cells, polypeptides and pharmaceutical formulations.

#### 83869-56-1, Gmcsf IT

RL: BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (vaccine for down-regulation of amyloid)

L32 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

Entered STN: 14 Apr 2000

2000:240985 HCAPLUS ACCESSION NUMBER:

DOCUMENT NUMBER: 132:292701

Novel methods for therapeutic vaccination TITLE:

Steinaa, Lucilla; Mouritsen, Soren; Nielsen, Klaus INVENTOR(S):

Gregorious; Haaning, Jesper; Leach, Dana; Dalum,

Iben; Gautam, Anand; Birk, Peter; Karlsson,

Gunilla

M & E Biotech A/S, Den. PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 220 pp.

CODEN: PIXXD2

Patent DOCUMENT TYPE: LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PAT	ENT 1	NO.			KIN	D	DATE			APPL	ICAT	ION I	NO.		Di	ATE	
									,	WO 1999-DK525				19991005			
WO	2000																
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		CR,	CU,	CZ,	CZ,	DE,	DE,	DK,	DK,	DM,	EE,	EE,	ES,	FI,	FI,	GB,	
		GD,	GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	ΚE,	KG,	KP,	KR,	
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										ZW,							
			TJ,		-	-	-	•									
	RW:	GH,	GM,	KE,	LS,	MW,	SD,	SL,	SZ,	TZ,	UG,	ZW,	AT,	BE,	CH,	CY,	
										IT,							
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CA	2345															9991005	
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	7517																
EP	1117	421			A2		2001	0725		EP 1	999-	9459	67		1	9991005	
	1117						2004										
									GB.	GR,	IT.	LI.	LU.	NL.	MC,	IE,	
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TР	2001						2001	0821		TR 2	001-	2001	0093	6	1	9991005	
	2002									JP 2						9991005	
υĽ	2002	J2 U4			12		2002	0020		J. 2	000	0,00	00		_	2222000	

Shears 571-272-2528 Searcher :

EE 2	200100	203	3		Α	2002	1015	EE	200	01-2	203				19991005
NZ 5	511055	<b>,</b>			Α	2003	31031	NZ	199	99-5	5110	55			19991005
AT 2	269100	)			E	2004	0715	AΤ	199	99-9	94596	67			19991005
PT 1	11742	21			$\mathbf{T}$	2004	1130	PT	199	99-9	94590	67			19991005
ES 2	22272	8.			Т3	2005	0201	ES	199	99-9	94596	57			19991005
EP 1	L50260	2			A2	2005	0202	EP	200	04-7	76709	9			19991005
	R: A	ΔT,	BE,	CH,	DE,	DK, ES,	FR,	GB, G	R, ]	IT,	LI,	LU,	NL,	SE	E, MC,
	F	T,	IE,	SI,	LT,	LV, FI,	RO,	MK, C	Y, <i>I</i>	ΑL					
NO 2	200100	158	36		Α	2001	.0531	ИО	200	01-1	1586				20010328
ZA 2	200100	260	)3		Α	2002	0930	ZA	200	01-2	2603				20010329
HR 2	200100	031	L 9		A1	2002	0630	HR	200	01-3	319				20010504
US 2	200414	195	58		A1	2004	0722	US	200	03-4	4417	79			20030519
PRIORITY	APPLN	I. ]	NFO.	. :				DK	199	98-1	L261			A	19981005
								US	199	98-1	L050:	11P		P	19981020
								EP	199	99-9	94590	67		АЗ	19991005
								US	199	99-4	1131	36		A1	19991005
								WO	199	99-1	OK52	5		W	19991005

A method is disclosed for inducing cell-mediated immunity against AB cellular antigens. More specifically, the invention provides for a method for inducing cytotoxic T-lymphocyte immunity against weak antigens, notably self-proteins. The method entails that antigen presenting cells are induced to present at least one CTL epitope of the weak antigen and at the same time presenting at least one foreign T-helper lymphocyte epitope. In a preferred embodiment, the antigen is a cancer specific antigen, e.g. prostate specific membrane antigen (PSM), Her2, or FGF8b. The method can be exercised by using traditional polypeptide vaccination, but also by using live attenuated vaccines or nucleic acid vaccination. The invention furthermore provides immunogenic analogs of PSM, Her2 and FGF8b, as well as nucleic acid mols. encoding these analogs. Also vectors and transformed cells are disclosed. The invention also provides for a method for identification of immunogenic analogs of weak or non-immunogenic antigens.

# IT 3700-67-2 83869-56-1, GM-CSF 141256-04-4, QS21

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (weak antigens inserted with foreign T cell epitope as vaccines)

L32 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2005 ACS on STN

ED Entered STN: 10 Feb 1999

ACCESSION NUMBER: 1999:85374 HCAPLUS

DOCUMENT NUMBER: 130:250895

TITLE: Model multiple antigenic and homopolymeric

peptides from non-repetitive sequences of malaria merozoite proteins elicit biologically irrelevant

antibodies

AUTHOR(S): Ramasamy, R.; Kanagaratnam, R.; Chandanie, P. D.

F.; Kulachelvy, K.; Ramasamy, M. S.; Dharmasena,

P. M.

CORPORATE SOURCE: Molecular Biology Immunology Laboratories,

Division Life Sciences, Institute Fundamental

Studies, Kandy, Sri Lanka

SOURCE: Biochimica et Biophysica Acta, Molecular Basis of

Disease (1999), 1453(1), 115-125

CODEN: BBADEX; ISSN: 0925-4439

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal LANGUAGE: English

AB Three model peptides containing B-epitopes from conserved, non-repetitive regions of the merozoite surface antigens, MSA2 and MSA1, and the

erythrocyte binding protein EBP of

Plasmodium falciparum were synthesized. The

peptides incorporated GPG spacers and C residues at the N and C termini, and were polymerized by oxidation to form cystine bridges.

Multiple

copies of essentially the same peptide sequences were also synthesized on a branching lysyl matrix to form a tetrameric multiple antigen peptide. Rabbits were immunized with the polymerized and multiple antigen peptides, in alum followed by Freund's adjuvant, and the antibody responses examined by IFA and ELISA. Reproducible antibody responses were obtained against the MSAl and EBP but not MSA2 peptides. IgG antibody levels detected by ELISA after three injections of antigen in alum, increased significantly after further immunization in Freund's adjuvant. IgG levels were largely maintained for at least 23 wk after the final immunization. IgM antibodies, generally detectable only after immunization in Freund's adjuvant, were absent 23 wk later. Antibody titers against the native protein on fixed parasites, assayed by IFA, were three to five orders of magnitude lower than the corresponding ELISA titers against the peptides. Antibody-dependent inhibition of P.

falciparum growth in vitro could not be demonstrated with the immune rabbit sera. The MSA1 and EBP peptides elicited cross-reactive antibodies. The results suggest that the selected non-repetitive sequences are conformationally constrained in the native proteins and only a small proportion of the anti-peptide antibodies bind to the native proteins. The significance of the findings for the development of peptide vaccines and the use of peptides in immunoassays is discussed.

REFERENCE COUNT:

THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FILE 'JAPIO' ENTERED AT 15:50:30 ON 22 NOV 2005

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1 S L7 L33 10 S L30 L34

L35 10 S L33 OR L34

6 DUP REM L35 (4 DUPLICATES REMOVED) L36

L36 ANSWER 1 OF 6 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

ACCESSION NUMBER: 2003-092869 [08] WPIDS

DOC. NO. CPI:

C2003-023133

TITLE:

New vaccine against malaria Plasmodium

falciparum parasite comprising Erythrocyte Binding Protein

polypeptide.

DERWENT CLASS:

B04 C06 D16

INVENTOR(S):

MAYER, G; MILLER, L H

PATENT ASSIGNEE(S):

(USSH) US DEPT HEALTH & HUMAN SERVICES; (MAYE-I)

MAYER G; (MILL-I) MILLER L H

COUNTRY COUNT:

100

PATENT INFORMATION:

WEEK LA PG KIND DATE PATENT NO

WO 2002078603 A2 20021010 (200308) \* EN 55

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW

MZ NL OA PT SD SE SL SZ TR TZ UG ZM ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG

KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ

VN YU ZA ZM ZW

AU 2002338238 A1 20021015 (200432)

US 2005239730 A1 20051027 (200571)

# APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002078603 AU 2002338238 US 2005239730	A2 A1 A1 Provisional Cont of	WO 2002-US10071 AU 2002-338238 US 2001-281130P WO 2002-US10071 US 2003-677980	20020329 20020329 20010402 20020329 20031002

# FILING DETAILS:

PATENT NO	KIND	PATENT NO
AII 2002338238	Al Based on	WO 2002078603

PRIORITY APPLN. INFO: US 2001-281130P 20010402; US

2003-677980 20031002

ΑN 2003-092869 [08] WPIDS

WO 200278603 A UPAB: 20030204 AΒ

> NOVELTY - A new vaccine composition comprises a polypeptide or polynucleotide and a vehicle. The polypeptide or polynucleotide comprises an amino acid or nucleic acid sequence, respectively, that encodes a BAEBL polypeptide or its portion.

ACTIVITY - Protozoacide; Immunostimulant.

No biological data given. MECHANISM OF ACTION - Vaccine.

No biological data given.

USE - The vaccine composition is useful for preparing a medicament for vaccinating a human against a malaria Plasmodium parasite (claimed). Dwg.0/7

L36 ANSWER 2 OF 6 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

ACCESSION NUMBER: 2002073898 EMBASE

TITLE: A multilateral effort to develop DNA vaccines against

falciparum malaria.

AUTHOR: Kumar S.; Epstein J.E.; Richie T.L.; Nkrumah F.K.;

Soisson L.; Carucci D.J.; Hoffman S.L.

CORPORATE SOURCE: S. Kumar, Malaria Program, Naval Medical Research

Center, Silver Spring, MD 20910, United States.

kumars@nmrc.navy.mil

SOURCE: Trends in Parasitology, (1 Mar 2002) Vol. 18, No. 3,

pp. 129-135. Refs: 55

ISSN: 1471-4922 CODEN: TPRACT

PUBLISHER IDENT.: S 1471-4922(01)02207-3

COUNTRY: United Kingdom

DOCUMENT TYPE: Journal; General Review FILE SEGMENT: 004 Microbiology

026 Immunology, Serology and Transplantation

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

ENTRY DATE: Entered STN: 20020307

Last Updated on STN: 20020307

AB Scientists from several organizations worldwide are working together to develop a multistage, multigene DNA-based vaccine against

Plasmodium falciparum malaria. This collaborative

vaccine development effort is named Multi-Stage DNA-based Malaria Vaccine Operation. An advisory board of international experts in vaccinology, malariology and field trials provides the scientific oversight to support the operation. This article discusses the rationale for the approach, underlying concepts and the pre-clinical development process, and provides a brief outline of the plans for the clinical testing of a multistage, multiantigen malaria vaccine based on DNA plasmid immunization technology.

L36 ANSWER 3 OF 6 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

ACCESSION NUMBER:

2001:8135 BIOSIS

DOCUMENT NUMBER:

PREV200100008135

TITLE:

Protection of Aotus monkeys by **Plasmodium** falciparum EBA-175 region II DNA prime-boost

immunization regimen.

AUTHOR(S):

Jones, T. R. [Reprint author]; Narum, D. L.; Gozalo, A. S.; Aguiar, J.; Fuhrmann, S. R.; Liang, H.; Haynes, J. D.; Moch, J. K.; Lucas, C.; Luu, T.; Magill, A. J.;

Hoffman, S. L.; Sim, B. K. L.

CORPORATE SOURCE:

Malaria Program, Naval Medical Research Center, Silver

Spring, MD, USA

SOURCE:

American Journal of Tropical Medicine and Hygiene, (March, 2000) Vol. 62, No. 3 Supplement, pp. 178-179.

print

Meeting Info.: 49th Annual Meeting of the American Society of Tropical Medicine and Hygiene. Houston, Texas, USA. October 29-November 02, 2000. American

Society of Tropical Medicine and Hygiene.

CODEN: AJTHAB. ISSN: 0002-9637.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 21 Dec 2000

Last Updated on STN: 21 Dec 2000

L36 ANSWER 4 OF 6 MEDLINE on STN DUPLICATE 1

ACCESSION NUMBER: 1999143796 MEDLINE DOCUMENT NUMBER: PubMed ID: 9989251

TITLE: Model multiple antigenic and homopolymeric peptides

from non-repetitive sequences of malaria merozoite proteins elicit biologically irrelevant antibodies.

AUTHOR: Ramasamy R; Kanagaratnam R; Chandanie P D; Kulachelvy

K; Ramasamy M S; Dharmasena P M

CORPORATE SOURCE: Molecular Biology Laboratory, Institute of Fundamental

Studies, Kandy, Sri Lanka.. ramasamy@slt.lk

SOURCE: Biochimica et biophysica acta, (1999 Jan 6) 1453 (1)

115-25.

Journal code: 0217513. ISSN: 0006-3002.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199902

ENTRY DATE: Entered STN: 19990311

Last Updated on STN: 19990311 Entered Medline: 19990225

AB Three model peptides containing B-epitopes from conserved, non-repetitive regions of the merozoite surface antigens, MSA2 and MSA1, and the erythrocyte binding protein

EBP of Plasmodium falciparum were

synthesised. The peptides incorporated GPG spacers and C residues at the N and C termini, and were polymerised by oxidation to form cystine bridges. Multiple copies of essentially the same peptide sequences were also synthesised on a branching lysyl matrix to form a tetrameric multiple antigen peptide. Rabbits were immunised with the polymerised and multiple antigen peptides, in alum followed by Freund's adjuvant, and the antibody responses examined by IFA and ELISA. Reproducible antibody responses were obtained against the MSA1 and EBP but not MSA2 peptides. IgG antibody levels detected by ELISA after three injections of antigen in alum, increased significantly after further immunisation in Freund's adjuvant. IgG levels were largely maintained for at least 23 weeks after the final immunisation. IgM antibodies, generally detectable only after immunisation in Freund's adjuvant, were absent 23 weeks later. Antibody titres against the native protein on fixed parasites, assayed by IFA, were three to five orders of magnitude lower than the corresponding ELISA titres against the peptides. Antibody-dependent inhibition of P. falciparum growth in vitro could not be

demonstrated with the immune rabbit sera. The MSA1 and EBP peptides elicited cross-reactive antibodies. The results suggest that the selected non-repetitive sequences are conformationally constrained in the native proteins and only a small proportion of the anti-peptide

antibodies bind to the native proteins. The significance of the findings for the development of peptide vaccines and the use of peptides in immunoassays is discussed.

L36 ANSWER 5 OF 6 MEDLINE on STN DUPLICATE 2

ACCESSION NUMBER: 97155716 MEDLINE DOCUMENT NUMBER: PubMed ID: 9002371 TITLE: Malaria vaccine.

AUTHOR: Khurana S K; Talib V H

CORPORATE SOURCE: Department of Laboratory Medicine, Safdarjang Hospital,

New Delhi.

SOURCE: Indian journal of pathology & microbiology, (1996 Dec)

39 (5) 433-41.

Journal code: 7605904. ISSN: 0377-4929.

PUB. COUNTRY: India

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199703

ENTRY DATE: Entered STN: 19970313

Last Updated on STN: 19970313 Entered Medline: 19970304

Recently it has become evident that he same candidate antigen can be AB shared by several of the parasite stages, and thus the concept of a multistage vaccine is becoming more and more attractive. A TDR Task Force evaluated the promise and stage of development of some 20 existing asexual blood stage candidate antigens and prepared a strategy for their development leading to clinical testing and field trials, Amongst these are merozoite surface protein 1 (MSP-1), Serine Rich Antigen (SERA), Apical Membrane Antigen (AMA-1), and Erythrocyte Binding Antigen (EBA). A field study conducted in Tanzanian children showed that the SPf66 Colombian vaccine was safe, induced antibodies, and reduced the risk of developing clinical malaria by around 30%. This study, confirmed the potential of the vaccine to confer partial protection in areas of high as well as low intensity of transmission. Pfs25 is a leading candidate antigen for a transmission blocking vaccine. It is found in the ookinete stage of the parasite in the mosquito midgut. Gramme amounts of GMP-grade material have been produced and a vaccine based on the Pfs25 antigen formulated with alum should have gone into phase I and II clinical trials in the USA and Africa during 1995. Because the first malaria prototype vaccine to be tried out in people on a large scale has been the polymerized synthetic peptide developed by patarroye on the basis of the SPf66 antigen of P. faliciparum, the results are with much interest. It is still premature to predict the effectiveness of this vaccine globally, but its development will encourage further progress in a fields that has repeatedly been characterized by raised and then dashed drops. These various vaccines are based on the classical approach to vaccination, which is to raise host immunity against the parasite so as to reduce parasite densities or to sterilize an infection. A newer approach is development of antidisease vaccines which aim to alleviate morbidity by suppressing immunopathology in the host. Antidisease vaccines are based on neutralizing parasite components that induce host pathology, leaving the parasite itself directly unaffected. These effects would occur when each type of the disease is considered by it self; however, synergistic effects may be expected when they are used in combination. The rational for vaccines based on any of these stages was that immunization of various hosts with whole parasites of each of these

stages has been able to induce protection or total transmission-blocking immunity. Less significant but not to be discounted is the fact that natural malaria infections in humans have been shown to induce immunity against every one of these parasite stages against which vaccines are being developed, an exception to this are those stages that are present only in the mosquito vector with component molecules not presented to the human host, such as exclusively ookinete antigens. For several very apparent reasons a vaccine today is conceived of as subnit as opposed to showl parasite vaccines, either in the form of a recombinant product or as synthetic peptide constructs. Genes coding for several antigens of P. falciparum and some of P. vivax have been seems to be common to many Plasmodium antigens; this is that they contain tandem repeats of oligopeptide sequences which often code for immunodominant epitopes. Following several decades of research on malaria vaccine development, the field at a glace may present a conflicting picture, with several achievements, and some disappointments and controversies. Issues facing the development of a malaria vaccine are complex. It is not clear how far we may yet be from achieving this goal. The work of the past decades has laid an extensive foundation of ralevant knowledge and technologies, and the goal it self remains as important as ever, will scientists remain committed to this objective?

L36 ANSWER 6 OF 6 EMBASE COPYRIGHT (c) 2005 Elsevier B.V. All rights reserved on STN

94150771 EMBASE ACCESSION NUMBER:

1994150771 DOCUMENT NUMBER:

Clinical trials of Plasmodium TITLE:

falciparum erythrocytic stage vaccines.

Ballou W.R. AUTHOR:

SOURCE:

Communicable Disease/Immunol. Div., Department of CORPORATE SOURCE:

Immunology, Walter Reed Army Inst. of

Research, Washington, DC 20307-5100, United States American Journal of Tropical Medicine and Hygiene,

(1994) Vol. 50, No. 4 SUPPL., pp. 59-65. ISSN: 0002-9637 CODEN: AJTHAB

United States COUNTRY:

Journal; Conference Article DOCUMENT TYPE:

004 Microbiology FILE SEGMENT:

> 017 Public Health, Social Medicine and Epidemiology

026 Immunology, Serology and Transplantation

037 Drug Literature Index

LANGUAGE: English SUMMARY LANGUAGE: English

Entered STN: 940622 ENTRY DATE:

Last Updated on STN: 940622

Efficacy trials for malaria blood-stage vaccines are currently underway in several field sites. Numerous issues surround the design and execution of such trials, and there are many opportunities for failure that have little to do with the vaccines per se. This review highlights some of the key issues to be considered by investigators designing such trials, including those that are unique to trials for erythrocytic stage vaccines.

FILE 'USPATFULL' ENTERED AT 15:58:53 ON 22 NOV 2005 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 22 Nov 2005 (20051122/PD) FILE LAST UPDATED: 22 Nov 2005 (20051122/ED)

HIGHEST GRANTED PATENT NUMBER: US6968571
HIGHEST APPLICATION PUBLICATION NUMBER: US2005257307
CA INDEXING IS CURRENT THROUGH 22 Nov 2005 (20051122/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 22 Nov 2005 (20051122/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2005

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>>> original, i.e., the earliest published granted patents or
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>>> applications. USPAT2 contains full text of the latest US >>> publications, starting in 2001, for the inventions covered in
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>>> published document but also a list of any subsequent
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>>> publications. The publication number, patent kind code, and
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                                                                          <<<
>>> classifications, or claims, that may potentially change from
                                                                          <<<
>>> the earliest to the latest publication.
                                                                          <<<
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This file contains CAS Registry Numbers for easy and accurate substance identification.

L1	27	SEA FILE=REGISTRY ABB=ON PLU=ON GLYCOPHORIN A ?/CN
L2	12304	SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR BAEBL OR ERYTHROCYT?
		BIND? OR GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR
		(EBA175 OR EBA OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR
		GLYCO CONNECTIN OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTE
		IN OR GLYCO PROTEIN) OR SIALOGLYCO PROTEIN
L3	284	SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND (PLASMODIUM OR
		P) (W) FALCIPARUM
F8 .		SEA FILE=REGISTRY ABB=ON PLU=ON FORMAMIDE/CN
L9	23155	SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR FORMAMIDE OR
		FORMIMIDIC OR METHANAMIDE OR NSC 748 OR NSC748
L13	8	SEA FILE=REGISTRY ABB=ON PLU=ON ("QS-21" OR "DETOX-PC"
		OR "MPL-SE" OR "MOGM-CSF" OR "TITERMAX-G" OR "CRL-1005" OR
		GERBU OR TERAMIDE OR PSC97B OR ADJUMER OR "PG-026" OR
		"GSK-1" OR GCMAF OR "B-ALETHINE" OR "MPC-026" OR ADJUVAX
		OR CPG ODN OR BETAFECTIN OR ALUM OR MF59)/CN
L14	11	SEA FILE=REGISTRY ABB=ON PLU=ON (QS 21 OR DETOX-PC OR
		MOGM CSF OR TITERMAX G OR CRL 1005 OR PSC 97B OR ADJUMER
		OR PG 026 OR GSK 1 OR B ALETHINE OR MPC 026 OR BETAFECTIN
		OR ALUM OR MF 59)/CN
L15		SEA FILE=REGISTRY ABB=ON PLU=ON DETOX PC/CN
L16		SEA FILE=REGISTRY ABB=ON PLU=ON GCMAF/CN
L17	2	SEA FILE=REGISTRY ABB=ON PLU=ON (TITERMAX/CN OR "TITERMAX GOLD"/CN)
L18		SEA FILE=REGISTRY ABB=ON PLU=ON B-ALETHINE/CN
L19	19	SEA FILE=REGISTRY ABB=ON PLU=ON L13 OR L14 OR L15 OR L16
		OR L17 OR L18
L20	47043	SEA FILE=HCAPLUS ABB=ON PLU=ON L19 OR QS21 OR QS 21 OR
		DETOX PC OR MPL SE OR MOGM OR TITERMAX OR CRL 1005 OR

GERBU OR TERAMIDE OR PSC97B OR ADJUMER OR (PG OR MPC) (W) (02 6 OR 26) OR GSK(W) (1 OR I) OR GCMAF OR (B OR BETA) (W) ALETHI NE OR ADJUVAX OR CPG ODN OR BETAFECTIN OR ALUM OR MF59 OR MF 59 1 SEA FILE=REGISTRY ABB=ON PLU=ON PSC 97B/CN L23 4 SEA FILE=REGISTRY ABB=ON PLU=ON GERBU ?/CN L24 L28 9 SEA FILE=REGISTRY ABB=ON PLU=ON "GM-CSF"?/CN 68994 SEA FILE=HCAPLUS ABB=ON PLU=ON L20 OR L23 OR L24 OR PSC L29 97B OR L28 OR GMCSF OR (GM OR GRANUL?) (1W) (CSF OR COLONY STIMUL?) 59 SEA FILE-USPATFULL ABB-ON PLU-ON L3 AND L29 L37 15 SEA FILE=USPATFULL ABB=ON PLU=ON L37 AND (L9 OR FORMAMIDE L38 L38 ANSWER 1 OF 15 USPATFULL on STN ACCESSION NUMBER: 2005:275167 USPATFULL TITLE: Plasmodium falciparum erythrocyte binding protein baebl for use as a vaccine Mayer, Ghislaine, Gaithersburg, MD, UNITED STATES INVENTOR(S): Miller, Louis H., Rockville, MD, UNITED STATES NUMBER KIND DATE -----PATENT INFORMATION: US 2005239730 A1 20051027 US 2003-677980 A1 20031002 (10) APPLICATION INFO.: RELATED APPLN. INFO.: Continuation of Ser. No. WO 2002-US10071, filed on 29 Mar 2002, PENDING NUMBER DATE \_\_\_\_\_ US 2001-281130P 20010402 (60) PRIORITY INFORMATION: DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOUNDER OF CLAIMS: 23
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS
LINE CO. FOURTEENTH FLOOR, IRVINE, CA, 92614, US NUMBER OF DRAWINGS: 8 Drawing Page(s) 1806 LINE COUNT: CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention relates to Plasmodium falciparum Erythrocyte Binding Protein BAEBL for use as a vaccine. CAS INDEXING IS AVAILABLE FOR THIS PATENT. L38 ANSWER 2 OF 15 USPATFULL on STN 2005:274547 USPATFULL ACCESSION NUMBER: Flea head, nerve cord, hindgut and malpighian TITLE: tubule nucleic acid molecules, proteins and uses thereof Brandt, Kevin S., Windsor, CO, UNITED STATES INVENTOR(S): Gaines, Patrick J., Fort Collins, CO, UNITED STATES

PATENT ASSIGNEE(S): Heska Corporation (U.S. corporation)

NUMBER

Searcher : Shears 571-272-2528

KIND

Stinchcomb, Dan T., Fort Collins, CO, UNITED STATES Wisnewski, Nancy, Fort Collins, CO, UNITED STATES

DATE

\_\_\_\_\_\_

PATENT INFORMATION: US 2005239103 A1 20051027 APPLICATION INFO.: US 2004-978245 A1 20041029 (10)

RELATED APPLN. INFO.: Continuation of Ser. No. US 2001-991936, filed on

21 Nov 2001, PENDING Division of Ser. No. US 2000-543668, filed on 7 Apr 2000, ABANDONED

NUMBER DATE

INFORMATION: US 1999-128704P 19990409 (60)

PRIORITY INFORMATION: US 1999-128'
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HESKA CORPORATION, INTELLECTUAL PROPERTY DEPT.,

3760 ROCKY MOUNTAIN AVE, LOVELAND, CO, 80538, US

NUMBER OF CLAIMS: 21 EXEMPLARY CLAIM: 1 LINE COUNT: 7785

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to flea head, nerve cord, hindgut and Malpighian tubule proteins; to flea head, nerve cord, hindgut and Malpighian tubule nucleic acid molecules, including those that encode such flea head, nerve cord, hindgut and Malpighian tubule proteins; to antibodies raised against such flea head, nerve cord, hindgut and Malpighian tubule proteins; and to compounds that inhibit flea head, nerve cord, hindgut and Malpighian tubule protein activity. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. Also included in the present invention are therapeutic compositions comprising proteins, nucleic acid molecules, or protective compounds derived from proteins of the present invention as well as the use of such therapeutic compositions to protect animals from flea infestation. Also included in the present invention is the use of flea head, nerve cord, hindgut and Malpighian tubule proteins to derive inhibitory compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 3 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2005:240602 USPATFULL TITLE: 89 human secreted proteins

INVENTOR(S): Rosen, Craig A., Laytonsville, MD, UNITED STATES Baker, Kevin P., Darnestown, MD, UNITED STATES

Birse, Charles E., North Potomac, MD, UNITED STATES

Choi, Gil H., Rockville, MD, UNITED STATES Fiscella, Michele, Bethesda, MD, UNITED STATES Komatsoulis, George A., Silver Spring, MD, UNITED

STATES

Moore, Paul A., North Bethesda, MD, UNITED STATES

Ni, Jian, Germantown, MD, UNITED STATES

Olsen, Henrik S., Gaithersburg, MD, UNITED STATES Ruben, Steven M., Brookeville, MD, UNITED STATES

Wei, Ping, Agoura Hills, CA, UNITED STATES Duan, D. Roxanne, Bethesda, MD, UNITED STATES Shi, Yanggu, Gaithersburg, MD, UNITED STATES

Continuation-in-part of Ser. No. WO 2002-US25107, RELATED APPLN. INFO.:

filed on 8 Aug 2002, PENDING Continuation-in-part of Ser. No. WO 2002-US33985, filed on 24 Oct 2002,

PENDING Continuation-in-part of Ser. No. WO 2002-US35606, filed on 6 Nov 2002, PENDING

Continuation-in-part of Ser. No. WO 2003-US4819, filed on 20 Feb 2003, PENDING Continuation-in-part of Ser. No. WO 2003-US4818, filed on 20 Feb 2003,

PENDING

DATE NUMBER \_\_\_\_\_

PRIORITY INFORMATION:

US 2001-311085P 20010810 (60)
US 2001-325209P 20010928 (60)
US 2001-330629P 20011026 (60)
US 2001-331046P 20011107 (60)
US 2002-358554P 20020222 (60)
US 2002-358714P 20020225 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

HUMAN GENOME SCIENCES INC, INTELLECTUAL PROPERTY LEGAL REPRESENTATIVE:

DEPT., 14200 SHADY GROVE ROAD, ROCKVILLE, MD,

20850, US

NUMBER OF CLAIMS: 14 EXEMPLARY CLAIM: LINE COUNT: 27921

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to human secreted polypeptides, and isolated nucleic acid molecules encoding said polypeptides, useful for diagnosing and treating diseases, disorders, and/or conditions related to said human secreted proteins. Antibodies that bind these polypeptides are also encompassed by the present invention. Also encompassed by the invention are vectors, host cells, and recombinant and synthetic methods for producing said polynucleotides, polypeptides, and/or antibodies. The invention further encompasses screening methods for identifying agonists and antagonists of polynucleotides and polypeptides of the invention.

The present invention further encompasses methods and compositions for inhibiting or enhancing the production and function of the polypeptides of the present invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 4 OF 15 USPATFULL on STN

2005:152003 USPATFULL ACCESSION NUMBER:

Gene expression during meningococcus adhesion TITLE:

Grandi, Guido, Milan, ITALY INVENTOR(S):

Chiron SRL, Siena, ITALY, 1-53100 (non-U.S. PATENT ASSIGNEE(S):

corporation)

NUMBER KIND DATE \_\_\_\_\_\_ US 2005130917 A1 20050616 US 2003-481456 A1 20020619 WO 2002-IB3072 20020619 PATENT INFORMATION: (10)APPLICATION INFO .: WO 2002-IB3072

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

LEGAL REPRESENTATIVE: Chiron Corporation, Intellectual Property - R440,

P.O. Box 8097, Emeryville, CA, 94662-8097, US

NUMBER OF CLAIMS: 31

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

7 Drawing Page(s)
4001

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The first step in human meningococcal infection involves adhesion to AΒ the epithelial cells of the nasopharynx tract. The invention provides various methods and compounds for preventing the attachment of Neisserial cells to epithelial cells and is based on the identification of 347 meningococcal genes which play a role in the adhesion process.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 5 OF 15 USPATFULL on STN

2004:315125 USPATFULL ACCESSION NUMBER:

Methods and reagents for regulation of cellular TITLE:

responses in biological systems

Kiessling, Laura L., Madison, WI, UNITED STATES INVENTOR(S):

Griffith, Byron R., Madison, WI, UNITED STATES Gestwicki, Jason E., Mountain View, CA, UNITED

Strong, Laura, Stoughton, WI, UNITED STATES

NUMBER KIND DATE

US 2004248801 A1 20041209 US 2004-806056 A1 20040322 PATENT INFORMATION: 20040322 (10) APPLICATION INFO.:

Continuation-in-part of Ser. No. US 2001-815296, RELATED APPLN. INFO.:

filed on 21 Mar 2001, PENDING

NUMBER \_\_\_\_\_

US 2003-456778P 20030321 (60) US 2000-191014P 20000321 (60) PRIORITY INFORMATION:

Utility DOCUMENT TYPE: APPLICATION FILE SEGMENT:

GREENLEE WINNER AND SULLIVAN P C, 5370 MANHATTAN LEGAL REPRESENTATIVE:

CIRCLE, SUITE 201, BOULDER, CO, 80303

NUMBER OF CLAIMS: 127 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 27 Drawing Page(s)

4275 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides multivalent ligands which carry or display at least one recognition element (RE), and preferably a plurality of recognition elements, for binding directly or indirectly to cells or other biological particles or more generally by binding to any biological molecule. The multivalent ligands provided can most generally function for binding or targeting to any biological particle or molecule and particularly to targeting of cells or cell types or viruses, for cell aggregation and generally for macromolecular assembly of biological macromolecules. The multivalent ligands of this invention are generally applicable for creating scaffolds (assemblies) of chemical or biological species, including without limitation, antigens, epitopes, ligand binding groups, ligands for cell receptors (cell surface receptors, transmembrane receptors and cytoplasmic receptors), and various macromolecules (nucleic acids, carbohydrates, saccharides, proteins,

peptides, etc.). In these scaffolds, the number, spacing, relative positioning and relative orientation of recognition elements can be controlled. Multivalent ligands of this invention can carry or display at least one signal recognition element (SRE), and preferably a plurality of signal recognition elements, and modulate biological responses in biological systems. Multivalent ligands of this invention can carry or display at least one binding recognition element (BRE), and preferably a plurality of binding recognition elements, optionally in combination with one or more SRE, and modulate biological responses in biological systems. The invention also relates to methods for aggregating biological particles and macromolecules and for modulating biological response employing the multivalent ligands provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 6 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:151408 USPATFULL

TITLE: Molecules for diagnostics and therapeutics INVENTOR(S): Panzer, Scott R, Sunnyvale, CA, UNITED STATES

Lincoln, Stephen E, Potomac, MD, UNITED STATES Altus, Christina M, Campbell, CA, UNITED STATES Dufour, Gerard E, Castro Valley, CA, UNITED STATES

Jackson, Jennifer L, Santa Cruz, CA, UNITED STATES Jones, Anissa L, San Jose, CA, UNITED STATES

Dam, Tam C, San Jose, CA, UNITED STATES
Liu, Tommy, Daly City, CA, UNITED STATES
Harris, Bernard, Sunnyvale, CA, UNITED STATES

Flores, Vincent Z, Union City, CA, UNITED STATES

Daffo, Abel, San Jose, CA, UNITED STATES

Marwaha, Rakesh, Burnaby, CANADA Chen, Alice J, San Jose, CA, UNITED STATES Chang, Simon C, Sunnyvale, CA, UNITED STATES

Gerstin, Edward H, JR., San Jose, CA, UNITED STATES
Peralta, Careyna H, Santa Clara, CA, UNITED STATES

David, Marie H, Daly City, CA, UNITED STATES Lewis, Samantha A, San Leandro, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004115629	A1	20040617	
APPLICATION INFO.:	US 2003-250889	A1	20030709	(10)
	WO 2002-US1009		20020109	
DOCUMENT OVDE.	11+111+++	. '		

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: INCYTE CORPORATION, 3160 PORTER DRIVE, PALO ALTO,

CA, 94304

NUMBER OF CLAIMS: 28
EXEMPLARY CLAIM: 1
LINE COUNT: 16703

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides purified human polynucleotides for diagnostics and therapeutics (dithp). Also en-compassed are the polypeptides (DITHP) encoded by dithp. The invention also provides for the use of dithp, or complements, oligonucleotides, or fragments thereof in diagnostic assays. The invention further provides for vectors and host cells containing dithp for the expression of DITHP. The invention additionally provides for the use of isolated and purified DITHP to induce antibodies and to screen libraries of

compounds and the use of anti-DITHP antibodies in diagnostic assays. Also provided are microarrays containing dithp and methods of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 7 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:144630 USPATFULL TITLE: Nucleic acid vectors

INVENTOR(S): Punnonen, Juha, Belmont, CA, UNITED STATES

Apt, Doris, Sunnyvale, CA, UNITED STATES

Whalen, Robert G., Foster City, CA, UNITED STATES
PATENT ASSIGNEE(S): Maxygen, Inc., a Delaware corporation, Redwood

City, CA, UNITED STATES, 94063 (U.S. corporation)

PATENT INFORMATION: US 2004110295 A1 20040610 APPLICATION INFO.: US 2003-446629 A1 20030528 (10)

NUMBER DATE

PRIORITY INFORMATION: US 2002-384002P 20020528 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: MAXYGEN, INC., INTELLECTUAL PROPERTY DEPARTMENT,

515 GALVESTON DRIVE, RED WOOD CITY, CA, 94063

NUMBER OF CLAIMS: 78
EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 8 Drawing Page(s)

LINE COUNT: 6550

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to nucleic acid vectors useful for expression and production of polypeptides, compositions comprising vectors, and

methods for the production and use of vectors and polypeptides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 8 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:78909 USPATFULL

TITLE: Non-stochastic generation of genetic vaccines and

enzymes

INVENTOR(S): Short, Jay M., Rancho Santa Fe, CA, United States

PATENT ASSIGNEE(S): Diversa Corporation, San Diego, CA, United States

(U.S. corporation)

APPLICATION INFO.: US 2000-498557 20000204 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000, now patented, Pat. No. US 6479253 Continuation-in-part of Ser. No. US

1999-332835, filed on 14 Jun 1999, now patented, Pat. No. US 6537776 Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, now patented, Pat. No. US 6352842 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999,

now patented, Pat. No. US 6238884

Continuation-in-part of Ser. No. US 1999-246178,

filed on 4 Feb 1999, now patented, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998, now patented, Pat. No. US 6335179 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1997-962504, filed on 31 Oct 1997 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, now patented, Pat. No. US 5965408 Continuation-in-part of Ser. No. US 1996-651568, filed on 22 May 1996, now patented, Pat. No. US 5939250

NUMBER DATE

PRIORITY INFORMATION: US 1995-8311P

19951207 (60) 19951207 (60)

US 1995-8316P
DOCUMENT TYPE: Utility

ility

FILE SEGMENT: GRANTED

PRIMARY EXAMINER: Park, Hankyel T.

LEGAL REPRESENTATIVE: Love, Jane M., Butler, James E.

NUMBER OF CLAIMS: 105 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 73 Drawing Figure(s); 64 Drawing Page(s)

LINE COUNT: 19098

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides methods of obtaining novel polynucleotides AΒ and encoded polypeptides by use of non-stochastic methods of directed evolution (DirectEvolution.TM.). These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). Through use of the claimed methods, genetic vaccines, enzymes, and other desirable molecules can be evolved towards desirable properties. For example, vaccine vectors can be obtained that exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like. This invention provides methods of obtaining novel enzymes that have optimized physical &/or biological properties. Furthermore, this invention provides methods of obtaining a variety of novel biologically active molecules, in the fields of antibiotics, pharmacotherapeutics, and transgenic traits.

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 9 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2004:63735 USPATFULL

TITLE: Molecules for diagnostics and therapeutics
INVENTOR(S): Panzer, Scott R., Sunnyvale, CA, UNITED STATES

Spiro, Peter A., Palo Alto, CA, UNITED STATES
Banville, Steven C., Palo Alto, CA, UNITED STATES

Shah, Purvi, San Jose, CA, UNITED STATES

Chalup, Michael S., Sunnyvale, CA, UNITED STATES Chang, Simon C, Mountain View, CA, UNITED STATES Chen, Alice J., San Jose, CA, UNITED STATES

D'Sa, Steven A., East Palo, CA, UNITED STATES Amshey, Stefan, San Francisco, CA, UNITED STATES Dahl, Christopher E., Fremont, CA, UNITED STATES

Dam, Tam C., San Jose, CA, UNITED STATES
Daniels, Susan E., Palo Alto, CA, UNITED STATES
Dufour, Gerard E., Castro Valley, CA, UNITED STATES
Flores, Vincent, Union City, CA, UNITED STATES
Fong, Willy T., San Francisco, CA, UNITED STATES
Greenawalt, Lila B., San Jose, CA, UNITED STATES
Jackson, Jennifer L., Mountain View, CA, UNITED
STATES

Jones, Anissa L., San Jose, CA, UNITED STATES Liu, Tommy F., Daly City, CA, UNITED STATES Lincoln, Ann M. Roseberry, Redwood City, CA, UNITED

Rosen, Bruce H., Menlo Park, CA, UNITED STATES Russo, Frank D., Rossette Court Sunnyvale, CA, UNITED STATES

Stockdreher, Theresa K., Sunnyvale, CA, UNITED STATES

Daffo, Abel, San Jose, CA, UNITED STATES
Wright, Rachel J., Mountain View, CA, UNITED STATES
Yap, Pierre E., Lafayette, CA, UNITED STATES
Yu, Jimmy Y., Fremont, CA, UNITED STATES
Bradley, Diana L., Soquel, CA, UNITED STATES
Bratcher, Shawn R., Mountain View, CA, UNITED
STATES

Chen, Wensheng, Mountain View, CA, UNITED STATES Cohen, Howard J., Palo Alto, CA, UNITED STATES Hodgson, David M., Ann Arbor, MI, UNITED STATES Lincoln, Stephen E., Redwood City, CA, UNITED STATES

Jackson, Stuart E., Mountain View, CA, UNITED STATES

NUMBER	KIND	DATE	
US 2004048253	A1	20040311	
US 2003-220120	A1	20030605	(10)
WO 2001-US6059		20010221	
Utility			

DOCUMENT TYPE: FILE SEGMENT:

PATENT INFORMATION: APPLICATION INFO.:

APPLICATION

LEGAL REPRESENTATIVE:

Incyte Genomics Inc, Legal Department, 3160 Porter

Drive, Palo Alto, CA, 94304

NUMBER OF CLAIMS: 27
EXEMPLARY CLAIM: 1
LINE COUNT: 17872

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides purified human polynucleotides for diagnostics and therapeutics (dithp). Also encompassed are the polypeptides (DITHP) encoded by dithp. The invention also provides for the use of dithp, or complements, oligonucleotides, or fragments thereof in diagnostic assays. The invention further provides for vectors and host cells containing dithp for the expression of DITHP. The invention additionally provides for the use of isolated and purified DITHP to induce antibodies and to screen libraries of compounds and the use of anti-DITHP antibodies in diagnostic assays. Also provided are microarrays containing dithp and methods of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 10 OF 15 USPATFULL on STN

ACCESSION NUMBER: TITLE:

INVENTOR(S):

2004:18785 USPATFULL

Molecules for diagnostics and therapeutics Hodgson, David M., Ann Arbor, MI, UNITED STATES Lincoln, Stephen E., Potomac, MD, UNITED STATES Russo, Frank D., Sunnyvale, CA, UNITED STATES Albany, Peter A., Berkeley, CA, UNITED STATES Banville, Steve C., Sunnyvale, CA, UNITED STATES Bratcher, Shawn R., Mountain View, CA, UNITED STATES

Dufour, Gerard E., Castro Valley, CA, UNITED STATES Cohen, Howard J., Palo Alto, CA, UNITED STATES Rosen, Bruce H., Menlo Park, CA, UNITED STATES Chalup, Michael S., Livingston, TX, UNITED STATES Jackson, Jennifer L., Santa Cruz, CA, UNITED STATES Jones, Anissa L., San Jose, CA, UNITED STATES Yu, Jimmy Y., Fremont, CA, UNITED STATES Greenawalt, Lila B., San Jose, CA, UNITED STATES

Panzer, Scott R., Sunnyvale, CA, UNITED STATES Roseberry Lincoln, Ann M., Potomac, MD, UNITED

STATES

Wright, Rachel J., Merivale, NEW ZEALAND Daniels, Susan E., Mountain View, CA, UNITED STATES Incyte Corporation, Palo Alto, CA, UNITED STATES (U.S. corporation)

PATENT ASSIGNEE(S):

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: US 2004014087 A1 20040122 US 2003-378029 A1 20030228 (10)

KIND

Continuation-in-part of Ser. No. US 2001-980285,

filed on 30 Nov 2001, PENDING A 371 of

International Ser. No. WO 2000-US15404, filed on 31

19990602 (60)

19990602 (60)

19990602 (60)

19990602 (60)

May 2000, PENDING

NUMBER

#### NUMBER DATE \_\_\_\_\_\_ US 1999-147500P 19990805 (60) US 1999-147542P 19990805 (60) PRIORITY INFORMATION: US 1999-147541P 19990805 (60) US 1999-147824P 19990805 (60) US 1999-147547P 19990805 (60) US 1999-147530P 19990805 (60) US 1999-147536P 19990805 (60) US 1999-147520P 19990805 (60) 19990805 (60) US 1999-147527P 19990805 (60) US 1999-147549P US 1999-147377P 19990804 (60) US 1999-147436P 19990804 (60) 19990603 (60) US 1999-137411P US 1999-137396P 19990603 (60) US 1999-137417P 19990603 (60) US 1999-137337P 19990603 (60) 19990602 (60) US 1999-137173P 19990602 (60) US 1999-137114P US 1999-137259P 19990602 (60)

US 1999-137113P

US 1999-137260P US 1999-137258P

US 1999-137109P

US 1999-137161P 19990601 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

INCYTE CORPORATION (formerly known as Incyte, LEGAL REPRESENTATIVE:

Genomics, Inc.), 3160 PORTER DRIVE, PALO ALTO, CA,

94304

NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM: 1 14819 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides purified human polynucleotides for diagnostics and therapeutics (dithp). Also encompassed are the polypeptides (DITHP) encoded by dithp. The invention also provides for the use of dithp, or complements, oligonucleotides, or fragments thereof in diagnostic assays. The invention further provides for vectors and host cells containing dithp for the expression of DITHP. The invention additionally provides for the use of isolated and purified DITHP to induce antibodies and to screen libraries of compounds and the use of anti-DITHP antibodies in diagnostic assays. Also provided are microarrays containing dithp and methods of use.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 11 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:312155 USPATFULL

Novel antigen binding molecules for therapeutic, TITLE:

diagnostic, prophylactic, enzymatic, industrial, and agricultural applications, and methods for

generating and screening thereof

Short, Jay M., Rancho Santa Fe, CA, UNITED STATES INVENTOR(S): PATENT ASSIGNEE(S):

Diversa Corporation, San Diego, CA, UNITED STATES,

92121 (U.S. corporation)

NUMBER KIND DATE \_\_\_\_\_\_

PATENT INFORMATION: APPLICATION INFO .: RELATED APPLN. INFO.: US 2003219752 A1 20031127 US 2002-151469 A1 20020517 (10)

Continuation-in-part of Ser. No. US 2000-535754, filed on 27 Mar 2000, GRANTED, Pat. No. US 6361974 Continuation-in-part of Ser. No. US 2000-522289, filed on 9 Mar 2000, GRANTED, Pat. No. US 6358709 Continuation-in-part of Ser. No. US 2000-498557, filed on 4 Feb 2000, ABANDONED Continuation-in-part of Ser. No. US 2000-495052, filed on 31 Jan 2000, GRANTED, Pat. No. US 6479258 Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, GRANTED, Pat. No. US 6352842 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, GRANTED, Pat. No. US 6238884 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820 Continuation of Ser. No. US 1998-185373, filed on 3 Nov 1998, GRANTED, Pat. No. US 6335179 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, GRANTED, Pat. No. US 5965408 Continuation-in-part of Ser. No. WO 2000-US16838, filed on 14 Jun 2000, PENDING Continuation-in-part of Ser. No. WO 2000-US8245,

filed on 27 Mar 2000, PENDING Continuation-in-part of Ser. No. WO 2000-US6497, filed on 9 Mar 2000, PENDING Continuation-in-part of Ser. No. US 2000-594459, filed on 14 Jun 2000, PENDING Continuation-in-part of Ser. No. US 1999-332835, filed on 14 Jun 1999, GRANTED, Pat. No. US 6537776 Continuation-in-part of Ser. No. WO 2000-US3086, filed on 4 Feb 2000, PENDING Continuation-in-part of Ser. No. US 2001-756459, filed on 8 Jan 2001, PENDING Continuation of Ser. No. US 1999-246178, filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820 Continuation of Ser. No. US 1998-185373, filed on 3 Nov 1998, GRANTED, Pat. No. US 6335179 Continuation-in-part of Ser. No. US 1996-760489, filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1999-376727, filed on 17 Aug 1999, GRANTED, Pat. No. US 6440668 Continuation of Ser. No. US 1996-677112, filed on 9 Jul 1996, GRANTED, Pat. No. US 5965408 Continuation-in-part of Ser. No. WO 1998-US22596, filed on 23 Oct 1998, PENDING Continuation-in-part of Ser. No. US 1999-214645, filed on 27 Sep 1999, PENDING A 371 of International Ser. No. WO 1997-US12239, filed on 9 Jul 1997, PENDING Continuation-in-part of Ser. No. US 2001-790321, filed on 21 Feb 2001, PENDING Division of Ser. No. US 2000-687219, filed on 12 Oct 2000, PENDING Continuation-in-part of Ser. No. US 2000-636778, filed on 11 Aug 2000, PENDING Continuation of Ser. No. US 1998-98206, filed on 16 Jun 1998, GRANTED, Pat. No. US 6174673 Continuation-in-part of Ser. No. US 2001-876276, filed on 7 Jun 2001, GRANTED, Pat. No. US 6468724 Continuation-in-part of Ser. No. US 2001-761559, filed on 16 Jan 2001, PENDING Division of Ser. No. US 1998-98206, filed on 16 Jun 1998, GRANTED, Pat. No. US 6174673 Continuation-in-part of Ser. No. US 1997-876276, filed on 16 Jun 1997, PENDING Continuation-in-part of Ser. No. US 2001-848185, filed on 3 May 2001, PENDING Division of Ser. No. US 2000-636778, filed on 11 Aug 2000, PENDING Continuation of Ser. No. US 1998-98206, filed on 16 Jun 1998, GRANTED, Pat. No. US 6174673 Continuation-in-part of Ser. No. US 1997-876276, filed on 16 Jun 1997, PENDING Continuation-in-part of Ser. No. US 2000-738871, filed on 15 Dec 2000, PENDING Continuation-in-part of Ser. No. US 2000-685432, filed on 10 Oct 2000, PENDING Continuation-in-part of Ser. No. US 1999-444112, filed on 22 Nov 1999, PENDING Continuation-in-part of Ser. No. US 1998-98206, filed on 16 Jun 1998, GRANTED, Pat. No. US 6174673 Continuation-in-part of Ser. No. US 1997-876276, filed on 16 Jun 1997, PENDING Continuation-in-part of Ser. No. WO 2000-US32208, filed on 22 Nov 2000, PENDING Continuation-in-part of Ser. No. WO 1998-US12674, filed on 16 Jun 1998, PENDING

NUMBER DATE

US 2001-300381P 20010517 (60) PRIORITY INFORMATION:

20010625 (60) US 2001-300907P US 1995-8311P 19951207 (60) 19951207 (60) US 1995-8316P US 1995-8311P 19951207 (60)

DOCUMENT TYPE: Utility

APPLICATION FILE SEGMENT:

FISH & RICHARDSON, PC, 4350 LA JOLLA VILLAGE DRIVE, LEGAL REPRESENTATIVE:

SUITE 500, SAN DIEGO, CA, 92122

102 NUMBER OF CLAIMS: EXEMPLARY CLAIM:

95 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 23775

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention is directed to methods for generating sets, or AΒ libraries, of nucleic acids encoding antigen-binding sites, such as antibodies, antibody domains or other fragments, including single and double stranded antibodies, major histocompatibility complex (MHC) molecules, T cell receptors (TCRs), and the like. This invention provides methods for generating variant antigen binding sites, e.g., antibodies and specific domains or fragments of antibodies (e.g., Fab or Fc domains), by altering template nucleic acids including by saturation mutagenesis, synthetic ligation reassembly, or a combination thereof. In one aspect, invention provides methods for generating all human or humanized antibodies and evolving them to achieve optimized properties related to stability, duration, expression, production, enzymatic activity, affinity, avidity, localization, and other immunological properties. Polypeptides generated by these methods can be analyzed using a novel capillary array platform, which provides unprecedented ultra-high throughput screening.

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 12 OF 15 USPATFULL on STN

PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.:

2003:294272 USPATFULL ACCESSION NUMBER:

TITLE: Non-stochastic generation of genetic vaccines

NUMBER

Short, Jay M., Rancho Santa Fe, CA, UNITED STATES INVENTOR(S):

KIND

\_\_\_\_\_\_\_ US 2003207287 A1 20031106 US 2002-223507 A1 20020819 (10) Continuation of Ser. No. US 2000-495052, filed on 31 Jan 2000, GRANTED, Pat. No. US 6479258 Continuation-in-part of Ser. No. US 1999-276860, filed on 26 Mar 1999, GRANTED, Pat. No. US 6352842 Continuation-in-part of Ser. No. US 1999-267118, filed on 9 Mar 1999, GRANTED, Pat. No. US 6238884 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, GRANTED, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998, GRANTED, Pat. No. US 6335179 Continuation of Ser. No. US 1996-760489, filed on 5 Dec 1996, GRANTED, Pat. No. US 5830696 Continuation-in-part of Ser. No. US 1996-677112, filed on 9 Jul 1996, GRANTED, Pat. No. US 5965408

DATE

NUMBER DATE

\_\_\_\_\_

PRIORITY INFORMATION: US 1995-8311P 19951207 (60) US 1995-8316P 19951207 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: HALE AND DORR LLP, 300 PARK AVENUE, NEW YORK, NY,

10022

NUMBER OF CLAIMS: 69 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 61 Drawing Page(s)

LINE COUNT: 20997

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides methods of obtaining vaccines by use of non-stochastic methods of directed evolution (DirectEvolution.TM.). These methods include non-stochastic polynucleotide site-saturation mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). Through use of the claimed methods, vectors can be obtained which exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 13 OF 15 USPATFULL on STN

ACCESSION NUMBER: 2003:250508 USPATFULL

TITLE: Heterologous fusion protein constructs comprising a

Leishmania antigen

INVENTOR(S): Skeiky, Yasir, Bellevue, WA, UNITED STATES

Brannon, Mark, Seattle, WA, UNITED STATES

Guderian, Jeffrey, Lynwood, WA, UNITED STATES

PATENT ASSIGNEE(S): Corixa Corporation, Seattle, WA, UNITED STATES

(U.S. corporation)

NUMBER DATE

PRIORITY INFORMATION: US 2001-275837P 20010313 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: TOWNSEND AND TOWNSEND AND CREW, LLP, TWO

EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO,

CA, 94111-3834

NUMBER OF CLAIMS: 82 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 Drawing Page(s)

LINE COUNT: 6952

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides a recombinant nucleic acid molecule encoding a fusion polypeptide, wherein the recombinant nucleic acid comprises a heterologous polynucleotide sequence encoding an antigen or an antigenic fragment, and a Leishmania polynucleotide sequence encoding a polypeptide or fragment thereof, wherein the Leishmania

polynucleotide is selected from the group consisting of TSA polynucleotide, LeIF polynucleotide, M15 polynucleotide, and 6H polynucleotide. The invention also provides an expression cassette comprising the recombinant nucleic acid molecule, host cells comprising the expression cassette, compositions, fusion polypeptides, and methods of their use in diagnosis or in generating a protective immune response in hosts.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 14 OF 15 USPATFULL on STN

2003:106914 USPATFULL ACCESSION NUMBER:

Flea head, nerve cord, hindgut and malpighian TITLE:

tubule nucleic acid molecules, proteins and uses

thereof

Brandt, Kevin S., Windsor, CO, UNITED STATES INVENTOR(S):

Gaines, Patrick J., Fort Collins, CO, UNITED STATES Stinchcomb, Dan T., Fort Collins, CO, UNITED STATES Wisnewski, Nancy, Fort Collins, CO, UNITED STATES

NUMBER KIND DATE \_\_\_\_\_

PATENT INFORMATION: APPLICATION INFO.:

US 2003073827 A1 20030417 US 2001-991936 A1 20011121 (9)

RELATED APPLN. INFO.:

Division of Ser. No. US 2000-543668, filed on 7 Apr

2000, PENDING

NUMBER DATE \_\_\_\_\_\_

PRIORITY INFORMATION:

US 1999-128704P 19990409 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION LEGAL REPRESENTATIVE: HESKA CORPORATION, INTELLECTUAL PROPERTY DEPT.,

1613 PROSPECT PARKWAY, FORT COLLINS, CO, 80525

NUMBER OF CLAIMS: 26 EXEMPLARY CLAIM:

7791 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to flea head, nerve cord, hindgut and Malpighian tubule proteins; to flea head, nerve cord, hindgut and Malpighian tubule nucleic acid molecules, including those that encode such flea head, nerve cord, hindgut and Malpighian tubule proteins; to antibodies raised against such flea head, nerve cord, hindgut and Malpighian tubule proteins; and to compounds that inhibit flea head, nerve cord, hindgut and Malpighian tubule protein activity. The present invention also includes methods to obtain such proteins, nucleic acid molecules, antibodies, and inhibitory compounds. Also included in the present invention are therapeutic compositions comprising proteins, nucleic acid molecules, or protective compounds derived from proteins of the present invention as well as the use of such therapeutic compositions to protect animals from flea infestation. Also included in the present invention is the use of flea head, nerve cord, hindgut and Malpighian tubule proteins to derive inhibitory compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L38 ANSWER 15 OF 15 USPATFULL on STN

2002:297432 USPATFULL ACCESSION NUMBER:

TITLE: INVENTOR(S):

Non-stochastic generation of genetic vaccines Short, Jay M., Rancho Santa Fe, CA, United States Diversa Corporation, San Diego, CA, United States PATENT ASSIGNEE(S):

(U.S. corporation)

KIND DATE NUMBER \_\_\_\_\_ PATENT INFORMATION:

APPLICATION INFO.:

US 6479258 B1 20021112 US 2000-495052 20000131 20000131 (9)

Continuation-in-part of Ser. No. US 1999-276860, RELATED APPLN. INFO.: filed on 26 Mar 1999 Continuation-in-part of Ser. No. US 1999-246178, filed on 4 Feb 1999, now

patented, Pat. No. US 6171820 Continuation-in-part of Ser. No. US 1998-185373, filed on 3 Nov 1998 Continuation-in-part of Ser. No. US 1996-760489, filed on 5 Dec 1996, now patented, Pat. No. US

5830696

NUMBER DATE \_\_\_\_\_\_

PRIORITY INFORMATION:

US 1995-8311P 19951207 (60)

DOCUMENT TYPE: Utility GRANTED FILE SEGMENT:

Park, Hankyel T. PRIMARY EXAMINER:

Gray Cary Ware & Freidenrich LLP, Haile, Lisa A. LEGAL REPRESENTATIVE:

NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

66 Drawing Figure(s); 61 Drawing Page(s) NUMBER OF DRAWINGS:

LINE COUNT: 19213

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

This invention provides methods of obtaining vaccines by use of non-stochastic methods of directed evolution (DirectEvolution.TM.). These methods include non-stochastic polynucleotide site-satuaration mutagenesis (Gene Site Saturation Mutagenesis.TM.) and non-stochastic polynucleotide reassembly (GeneReassembly.TM.). Through use of the claimed methods, vectors can be obtained which exhibit increased efficacy for use as genetic vaccines. Vectors obtained by using the methods can have, for example, enhanced antigen expression, increased uptake into a cell, increased stability in a cell, ability to tailor an immune response, and the like.

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

	FILE 'HCAP	LUS' ENTERED AT 16:01:56 ON 22 NOV 2005
L1	27	SEA FILE=REGISTRY ABB=ON PLU=ON GLYCOPHORIN A ?/CN
L2	12304	SEA FILE=HCAPLUS ABB=ON PLU=ON L1 OR BAEBL OR ERYTHROCYT?
		BIND? OR GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR
		(EBA175 OR EBA OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR
		GLYCO CONNECTIN OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTE
		IN OR GLYCO PROTEIN) OR SIALOGLYCO PROTEIN
L3	284	SEA FILE=HCAPLUS ABB=ON PLU=ON L2 AND (PLASMODIUM OR
		P) (W) FALCIPARUM
L8		SEA FILE=REGISTRY ABB=ON PLU=ON FORMAMIDE/CN
L9	23155	SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR FORMAMIDE OR
		FORMIMIDIC OR METHANAMIDE OR NSC 748 OR NSC748
L10	1	SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND L9

0 S L10 NOT L32 L39 (FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 16:02:30 ON 22 NOV 2005) 1 S L10 L40 0 S L40 NOT L35 L41 (FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 16:05:40 ON 22 NOV 2005) -Author(s) 4183 SEA ABB=ON PLU=ON "MAYER G"?/AU L42 21778 SEA ABB=ON PLU=ON "MILLER L"?/AU L43 5 SEA ABB=ON PLU=ON L42 AND L43 L44 25956 SEA ABB=ON PLU=ON L42 OR L43 L45 110 SEA ABB=ON PLU=ON L45 AND L3
78 SEA ABB=ON PLU=ON L46 AND (PROTEIN OR POLYPROTEIN OR L46 L47 POLYPEPTIDE OR PEPTIDE) 14 S L47 AND (HYBRIDIS? OR HYBRIDIZ?) L50 16 S L44 OR L50 L5110 DUP REM L51 (6 DUPLICATES REMOVED) L52 L52 ANSWER 1 OF 10 USPATFULL on STN ACCESSION NUMBER: 2005:275167 USPATFULL Plasmodium falciparum TITLE: erythrocyte binding protein baebl for use as a vaccine Mayer, Ghislaine, Gaithersburg, MD, INVENTOR(S): UNITED STATES Miller, Louis H., Rockville; MD, UNITED STATES NUMBER KIND DATE \_\_\_\_\_\_ US 2005239730 A1 20051027 US 2003-677980 A1 20031002 (10) PATENT INFORMATION:
APPLICATION INFO.: RELATED APPLN. INFO.: Continuation of Ser. No. WO 2002-US10071, filed on 29 Mar 2002, PENDING NUMBER DATE US 2001-281130P 20010402 (60) PRIORITY INFORMATION: DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT: LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 2040 MAIN STREET, FOURTEENTH FLOOR, IRVINE, CA, 92614, US NUMBER OF CLAIMS: 23 EXEMPLARY CLAIM: 8 Drawing Page(s) NUMBER OF DRAWINGS: LINE COUNT: 1806 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention relates to Plasmodium falciparum Erythrocyte Binding Protein BAEBL for use as a vaccine.

Searcher : Shears 571-272-2528

L52 ANSWER 2 OF 10 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

STN

ACCESSION NUMBER: 2005:302211 BIOSIS

DOCUMENT NUMBER: PREV200510096236

TITLE: Characterization of the Plasmodium falciparum erythrocyte-binding ligand EBL-1.

AUTHOR(S): Mayer, G. [Reprint Author]; Miller, L.

H.

CORPORATE SOURCE: NIH, Lab Malaria and Vector Res, Bethesda, MD USA SOURCE: Molecular Biology of the Cell, (NOV 2004) Vol. 15, No.

Suppl. S, pp. 464A-465A.

Meeting Info.: 44th Annual Meeting of the

American-Society-for-Cell-Biology. Washington, DC, USA.

December 04 -08, 2004. Amer Soc Cell Biol.

CODEN: MBCEEV. ISSN: 1059-1524.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 15 Aug 2005

Last Updated on STN: 15 Aug 2005

L52 ANSWER 3 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2

ACCESSION NUMBER: 2002:777627 HCAPLUS

DOCUMENT NUMBER: 137:293522

TITLE: Plasmodium falciparum

erythrocyte binding

protein BAEBL for use as vaccine
against malarial Plasmodium parasite

INVENTOR(S): Mayer, Ghislaine; Miller, Louis

н.

PATENT ASSIGNEE(S): The Government of the United States of America,

Represented by the Secretary, Department of Health

and Human Services, USA PCT Int. Appl., 57 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

SOURCE:

IAIMI No.	DATE		
WO 2002078603 A2 20021010 WO 2002-US10071 2	20020329		
WO 2002078603 A3 20030828  W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR, KR, KR, KR, KR, KR, KR, KR, KR	GD, KZ,		
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM,	TJ,		
BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG	CG,		
US 2005239730 A1 20051027 US 2003-677980 2 PRIORITY APPLN. INFO.: US 2001-281130P P 2 WO 2002-US10071 A1 2			

AB The invention relates to Plasmodium falciparum

# Erythrocyte Binding Protein BAEBL

for use as a vaccine.

L52 ANSWER 4 OF 10 USPATFULL on STN

ACCESSION NUMBER: 2002:301756 USPATFULL

TITLE: Binding domains from Plasmodium vivax and

MIIMBED

Plasmodium falciparum erythrocyte

INVENTOR(S): Sim, Kim Lee, Gaithersburg, MD, UNITED STATES

Chitnis, Chetan, Washington, DC, UNITED STATES

Miller, Louis H., Bethesda, MD, UNITED

KIND

STATES

Peterson, David S., Rockville, MD, UNITED STATES

Su, Xin-Zhuan, Rockville, MD, UNITED STATES

Wellems, Thomas E., Rockville, MD, UNITED STATES

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	NOMBER	KIND	DAIL	
PATENT INFORMATION:	US 2002169305	A1	20021114	
	US 6962987	B2,	20051108	
APPLICATION INFO.:	US 2002-153273	A1	20020521	(10)
RELATED APPLN. INFO.:	Continuation of	Ser. No.	. US 1998-	210288, filed on
	11 Dec 1998, GRA	NTED, Pa	at. No. US	6392026 Division
	of Ser. No. US 1	995-5684	459, filed	on 7 Dec 1995,
	GRANTED, Pat. No	. US 584	49306 Cont	inuation of Ser.

No. US 1993-119677, filed on 10 Sep 1993, ABANDONED Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: KNOBBE MARTENS OLSON & BEAR LLP, 620 NEWPORT CENTER

DRIVE, SIXTEENTH FLOOR, NEWPORT BEACH, CA, 92660

NUMBER OF CLAIMS: 1 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 7 Drawing Page(s)

LINE COUNT: 3119

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides isolated polypeptides

useful in the treatment and prevention of malaria caused by

Plasmodium falciparum or P. vivax. In particular,

the polypeptides are derived from the binding domains of the proteins in the EBL family as well as the sialic acid

binding protein (SABP) on P. falciparum

merozoites. The polypeptides may also be derived from the

Duffy antigen binding protein (DABP) on P. vivax

merozoites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 5 OF 10 USPATFULL on STN

ACCESSION NUMBER: 2002:116395 USPATFULL

TITLE: Binding domains from plasmodium vivax and

plasmodium falciparum erythrocyte binding

proteins

INVENTOR(S): Sim, Kim Lee, Gaithersburg, MD, United States

Chitnis, Chetan, Washington, DC, United States

Miller, Louis H., Bethesda, MD, United

States

Peterson, David S., Rockville, MD, United States Su, Xin-Zhuan, Rockville, MD, United States

Wellems, Thomas E., Rockville, MD, United States

PATENT ASSIGNEE(S): The United States of America as represented by the

Department of Health and Human Services,

Washington, DC, United States (U.S. government)

NUMBER KIND DATE

PATENT INFORMATION: US 6392026 B1 20020521 APPLICATION INFO.: US 1998-210288 B1 19981211 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1995-568459, filed on 7 Dec

1995, now patented, Pat. No. US 5849306

Continuation of Ser. No. US 1993-119677, filed on

10 Sep 1993, now abandoned

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Navarro, Mark

LEGAL REPRESENTATIVE: Knobbe, Martens, Olson & Bear LLP

NUMBER OF CLAIMS: 18 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 7 Drawing Figure(s); 7 Drawing Page(s)

LINE COUNT: 1227

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides isolated polypeptides

useful in the treatment and prevention of malaria caused by

Plasmodium falciparum or P. vivax. In particular,

the polypeptides are derived from the binding domains of the proteins in the EBL family as well as the sialic acid

binding protein (SABP) on P. falciparum

merozoites. The polypeptides may also be derived from the

Duffy antigen binding protein (DABP) on P. vivax

merozoites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 6 OF 10 USPATFULL on STN

ACCESSION NUMBER: 1999:155211 USPATFULL

TITLE: Binding domains from plasmodium vivax and

plasmodium falciparum erythrocyte binding

proteins

INVENTOR(S): Sim, Kim Lee, Gaithersburg, MD, United States

Chitnis, Chetan, Washington, DC, United States

Miller, Louis H., Bethesda, MD, United

States

Peterson, David S., Rockville, MD, United States Su, Xin-Zhuan, Rockville, MD, United States Wellems, Thomas E., Rockville, MD, United States

PATENT ASSIGNEE(S): The United States of America as represented by the Secretary, Department of Health and Human Services,

Washington, DC, United States (U.S. government)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1993-119677,

filed on 10 Sep 1993, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Cunningham, Thomas M.

LEGAL REPRESENTATIVE: Knobbe Martens Olson & Bear

NUMBER OF CLAIMS: 20 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 6 Drawing Page(s)

LINE COUNT: 4566

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides isolated polypeptides AB

useful in the treatment and prevention of malaria caused by

Plasmodium falciparum or P. vivax. In particular,

the polypeptides are derived from the binding domains of the proteins in the DBL family as well as the sialic acid

binding protein (SABP) on P. falciparum

merozoites. The polypeptides may also be derived from the Duffy antigen binding protein (DABP) on P. vivax

merozoites.

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 7 OF 10 USPATFULL on STN

1998:156927 USPATFULL ACCESSION NUMBER:

Binding domains from Plasmodium vivax and TITLE:

> Plasmodium falciparum erythrocyte binding

proteins

Sim, Kim Lee, Gaithersburg, MD, United States INVENTOR(S):

Chitnis, Chetan, Washington, DC, United States

Miller, Louis H., Bethesda, MD, United

Peterson, David S., Rockville, MD, United States Su, Xin-Zhuan, Rockville, MD, United States Wellems, Thomas E., Rockville, MD, United States

The United States of America as represented by the PATENT ASSIGNEE(S):

Department of Health and Human Services,

Washington, DC, United States (U.S. government)

KIND NUMBER DATE PATENT INFORMATION: US 5849306 19981215 US 1995-568459 19951207 (8)

APPLICATION INFO.:

Continuation of Ser. No. US 1993-119677, filed on RELATED APPLN. INFO.:

10 Sep 1993, now abandoned

DOCUMENT TYPE: Utility FILE SEGMENT: Granted

PRIMARY EXAMINER: Cunningham, Thomas M.

LEGAL REPRESENTATIVE: Knobbe, Martens, Olson & Bear, LLP

NUMBER OF CLAIMS: 12 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 5 Drawing Figure(s); 4 Drawing Page(s)

2490 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention provides isolated polypeptides useful in the treatment and prevention of malaria caused by Plasmodium falciparum or P. vivax. In particular, the polypeptides are derived from the binding domains of the proteins in the EBL family as well as the sialic acid binding protein (SABP) on P. falciparum merozoites. The polypeptides may also be derived from the

Duffy antigen binding protein (DABP) on P. vivax

merozoites.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 8 OF 10 USPATFULL on STN

96:68110 USPATFULL ACCESSION NUMBER:

Plasmodium vivax and Plasmodium knowlesi Duffy TITLE:

receptor

Miller, Louis H., Bethesda, MD, United INVENTOR(S):

States

Adams, John H., Bethesda, MD, United States Kaslow, David C., Kensington, MD, United States Fang, Xiangdong, Bethesda, MD, United States

The United States of America as represented by the PATENT ASSIGNEE(S):

Secretary of Health and Human Services, Washington,

DC, United States (U.S. government)

NUMBER KIND DATE US 5541292 19960730 US 1992-916408 19920721 (7) PATENT INFORMATION:

APPLICATION INFO.:

RELATED APPLN. INFO.: Division of Ser. No. US 1990-554837, filed on 20

Jul 1990, now patented, Pat. No. US 5198347

DOCUMENT TYPE: Utility Granted FILE SEGMENT:

PRIMARY EXAMINER: Draper, Garnette D.

ASSISTANT EXAMINER: Ulm, John D.

LEGAL REPRESENTATIVE: Townsend and Townsend Khourie and Crew

3 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 52 Drawing Figure(s); 30 Drawing Page(s)

1120 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to DNA segments encoding the Duffy receptor of a Plasmodium parasite, the recombinant DNA and to recombinantly produced Duffy receptor. The Duffy receptor can be

utilized as a vaccine for humans against malaria.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L52 ANSWER 9 OF 10 HCAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3

ACCESSION NUMBER: 1995:700782 HCAPLUS

DOCUMENT NUMBER: 123:331352

Isolation of multiple sequences from the TITLE:

Plasmodium falciparum genome

that encode conserved domains homologous to those

in erythrocyte-binding

proteins

Peterson, David S.; Miller, Louis H.; AUTHOR(S):

Wellems, Thomas E.

CORPORATE SOURCE: Lab. Parasit. Dis., Natl. Inst. Allergy Infect.

Dis., Bethesda, MD, 20892, USA

Proceedings of the National Academy of Sciences of SOURCE:

the United States of America (1995), 92(15),

7100-4

CODEN: PNASA6; ISSN: 0027-8424 National Academy of Sciences

PUBLISHER: DOCUMENT TYPE: Journal

LANGUAGE: English

Open reading frames in the Plasmodium falciparum

genome encode domains homologous to the adhesive domains of the P. falciparum EBA-175 erythrocyte

-binding protein (eba-175 gene product)

and those of the Plasmodium vivax and Plasmodium knowlesi Duffy antigen-binding proteins. These domains are referred to as Duffy binding-like (DBL), after the receptor that dets. P. vivax invasion of Duffy blood group-pos. human erythrocytes. Using oligonucleotide primers derived from short regions of conserved sequence, the authors have developed a reverse transcription-PCR method that amplifies sequences encoding the DBL domains of expressed genes. Products of these reverse transcription-PCR amplifications include sequences of single-copy genes (including eba-175) and variably transcribed genes that cross-hybridize to multiple regions of the genome. Restriction patterns of the multicopy genes show a high degree of polymorphism among different parasite lines, whereas single-copy genes are generally conserved. Characterization of the single-copy genes has identified a gene (ebl-1) that is related to eba-175 and is likely to be involved in ervthrocyte invasion.

L52 ANSWER 10 OF 10 USPATFULL on STN

93:24823 USPATFULL ACCESSION NUMBER:

DNA encoding Plasmodium vivax and Plasmodium TITLE:

knowlesi Duffy receptor

Miller, Louis H., Bethesda, MD, United INVENTOR(S):

States

Adams, John H., Bethesda, MD, United States Kaslow, David C., Kensington, MD, United States Fang, Xiangdong, Bethesda, MD, United States

The United States of America as represented by the PATENT ASSIGNEE(S):

Department of Health and Human Services,

Washington, DC, United States (U.S. government)

NUMBER KIND DATE \_\_\_\_\_ \_\_\_\_ PATENT INFORMATION: APPLICATION INFO.: US 5198347 US 1990-554837 19930330 19900720 (7)

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Lacey, David L.
ASSISTANT EXAMINER: Ulm, John D.

LEGAL REPRESENTATIVE: Cushman, Darby & Cushman

NUMBER OF CLAIMS: 10 EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 54 Drawing Figure(s); 30 Drawing Page(s)

1121 LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to DNA segments encoding the Duffy AΒ receptor of a Plasmodium parasite, the recombinant DNA and to recombinantly produced Duffy receptor. The Duffy receptor can be utilized as a vaccine for humans against malaria.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

FILE 'HOME' ENTERED AT 16:15:31 ON 22 NOV 2005

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(FILE 'HCAPLUS' ENTERED AT 15:21:59 ON 22 NOV 2005)
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D COST

FILE 'HCAPLUS' ENTERED AT 15:24:46 ON 22 NOV 2005

FILE 'REGISTRY' ENTERED AT 15:25:00 ON 22 NOV 2005 E GLYCOPHORIN A/CN 5

L1 27 SEA ABB=ON PLU=ON GLYCOPHORIN A ?/CN E BAEBL/CN 5

FILE 'HCAPLUS' ENTERED AT 15:25:30 ON 22 NOV 2005 12304 SEA ABB=ON PLU=ON L1 OR BAEBL OR ERYTHROCYT? BIND? OR L2 GLYCOPHORIN(W) (A OR B OR C OR E OR HA) OR (EBA175 OR EBA OR EBP) (S) ERYTHROCYT? OR GLYCOCONNECTIN OR GLYCO CONNECTIN OR SIALOGLYCOPROTEIN OR SIALO(W) (GLYCOPROTEIN OR GLYCO PROTEIN) OR SIALOGLYCO PROTEIN 284 SEA ABB=ON PLU=ON L2 AND (PLASMODIUM OR P) (W) FALCIPARUM L3D KWIC 89 SEA ABB=ON PLU=ON L3 AND (VACCIN? OR IMMUNIS? OR L4 IMMUNIZ?) 249 SEA ABB=ON PLU=ON L2(L)((PLASMODIUM OR P)(W)FALCIPARUM) L5 57 SEA ABB=ON PLU=ON L5(L) (VACCIN? OR IMMUNIS? OR IMMUNIZ?) 1.6 D KWIC

L7 1 SEA ABB=ON PLU=ON L3 AND FORMAMIDE
D TI AU
D KWIC

FILE 'REGISTRY' ENTERED AT 15:32:08 ON 22 NOV 2005 E FORMAMIDE/CN 5

L8 1 SEA ABB=ON PLU=ON FORMAMIDE/CN
D CN

FILE 'HCAPLUS' ENTERED AT 15:32:40 ON 22 NOV 2005

L9 23155 SEA ABB=ON PLU=ON L8 OR FORMAMIDE OR FORMIMIDIC OR
METHANAMIDE OR NSC 748 OR NSC748

L10 1 SEA ABB=ON PLU=ON L3 AND L9

L11 3 SEA ABB=ON PLU=ON L3 AND (HYBRIDIS? OR HYBRIDIZ?)
L12 163 SEA ABB=ON PLU=ON L5(L)(POLYPEPTIDE OR POLYPROTEIN OR
PROTEIN OR PEPTIDE)

FILE 'REGISTRY' ENTERED AT 15:35:37 ON 22 NOV 2005

8 SEA ABB=ON PLU=ON ("QS-21" OR "DETOX-PC" OR "MPL-SE" OR "MOGM-CSF" OR "TITERMAX-G" OR "CRL-1005" OR GERBU OR TERAMIDE OR PSC97B OR ADJUMER OR "PG-026" OR "GSK-1" OR GCMAF OR "B-ALETHINE" OR "MPC-026" OR ADJUVAX OR CPG ODN OR BETAFECTIN OR ALUM OR MF59)/CN

L14 11 SEA ABB=ON PLU=ON (QS 21 OR DETOX-PC OR MOGM CSF OR TITERMAX G OR CRL 1005 OR PSC 97B OR ADJUMER OR PG 026 OR GSK 1 OR B ALETHINE OR MPC 026 OR BETAFECTIN OR ALUM OR MF 59)/CN

L15 1 SEA ABB=ON PLU=ON DETOX PC/CN E MOGM/CN

L16 1 SEA ABB=ON PLU=ON GCMAF/CN E TITERMAX/CN 5

L17 2 SEA ABB=ON PLU=ON (TITERMAX/CN OR "TITERMAX GOLD"/CN)

L18 L19	E "B-ALETHINE"/CN 5 E "B-ALETHINE"/CN 5 1 SEA ABB=ON PLU=ON B-ALETHINE/CN 19 SEA ABB=ON PLU=ON L13 OR L14 OR L15 OR L16 OR L17 OR L18
L20	FILE 'HCAPLUS' ENTERED AT 15:43:38 ON 22 NOV 2005 47043 SEA ABB=ON PLU=ON L19 OR QS21 OR QS 21 OR DETOX PC OR MPL SE OR MOGM OR TITERMAX OR CRL 1005 OR GERBU OR TERAMIDE OR PSC97B OR ADJUMER OR (PG OR MPC) (W) (026 OR 26) OR GSK(W) (1 OR I) OR GCMAF OR (B OR BETA) (W) ALETHINE OR
L21 L22	ADJUVAX OR CPG ODN OR BETAFECTIN OR ALUM OR MF59 OR MF 59 149 SEA ABB=ON PLU=ON L20 AND MILLER ?/AU 1 SEA ABB=ON PLU=ON L21 AND MAYER ?/AU D KWIC
L*** L23 L24	E GERBU/CN
L25 L26 L27	
L28	FILE 'REGISTRY' ENTERED AT 15:48:02 ON 22 NOV 2005 E "GM-CSF"/CN 5 9 SEA ABB=ON PLU=ON "GM-CSF"?/CN
L29 L30	FILE 'HCAPLUS' ENTERED AT 15:48:15 ON 22 NOV 2005 68994 SEA ABB=ON PLU=ON L20 OR L23 OR L24 OR PSC 97B OR L28 OR GMCSF OR (GM OR GRANUL?) (1W) (CSF OR COLONY STIMUL?)
	FILE 'REGISTRY' ENTERED AT 15:50:06 ON 22 NOV 2005
L32	FILE 'HCAPLUS' ENTERED AT 15:50:06 ON 22 NOV 2005  D QUE L7  D QUE L30  4 SEA ABB=ON PLU=ON L7 OR L30  D 1-4 .BEVSTR
L33 L34 L35 L36	10 SEA ABB=ON PLU=ON L33 OR L34
L37 L38	

D QUE

D QUE

D 1-15 IBIB ABS

FILE 'HCAPLUS' ENTERED AT 16:01:04 ON 22 NOV 2005

D QUE L10

L39 O SEA ABB=ON PLU=ON L10 NOT L32

FILE 'HCAPLUS' ENTERED AT 16:01:56 ON 22 NOV 2005 D QUE L10

FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO' ENTERED AT 16:02:30 ON 22 NOV 2005

L40 1 SEA ABB=ON PLU=ON L10

L41 0 SEA ABB=ON PLU=ON L40 NOT L35

FILE 'HCAPLUS, MEDLINE, BIOSIS, EMBASE, WPIDS, CONFSCI, SCISEARCH, JICST-EPLUS, JAPIO, USPATFULL' ENTERED AT 16:05:40 ON 22 NOV 2005

		SPAIR ON ENTERED AT 10:03:40 ON 22 NOV 2003
L42		PLU=ON "MAYER G"?/AU
L43	21778 SEA ABB=ON	PLU=ON "MILLER L"?/AU
L44	5 SEA ABB=ON	PLU=ON L42 AND L43
L45	25956 SEA ABB=ON	PLU=ON L42 OR L43
L46	110 SEA ABB=ON	PLU=ON L45 AND L3
L47	78 SEA ABB=ON	PLU=ON L46 AND (PROTEIN OR POLYPROTEIN OR
	POLYPEPTIDI	E OR PEPTIDE)
L48	80 SEA ABB=ON	PLU=ON L44 OR L47
L49	31 DUP REM L48	8 (49 DUPLICATES REMOVED)
L50	14 SEA ABB=ON	PLU=ON L47 AND (HYBRIDIS? OR HYBRIDIZ?)
L51	16 SEA ABB=ON	PLU=ON L44 OR L50
L52	10 DUP REM L5	1 (6 DUPLICATES REMOVED)
	D 1-10 IBI	B ABS

FILE 'HOME' ENTERED AT 16:15:31 ON 22 NOV 2005

# FILE HCAPLUS

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FILE COVERS 1907 - 22 Nov 2005 VOL 143 ISS 22 FILE LAST UPDATED: 21 Nov 2005 (20051121/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

# FILE REGISTRY

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 21 NOV 2005 HIGHEST RN 868586-21-4 DICTIONARY FILE UPDATES: 21 NOV 2005 HIGHEST RN 868586-21-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

\*\*\*\*\*\*\*\*\*\*\*\*

Structure search iteration limits have been increased. See HELP SLIMI for details.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

#### FILE MEDLINE

FILE LAST UPDATED: 16 NOV 2005 (20051116/UP). FILE COVERS 1950 TO DA

On December 19, 2004, the 2005 MeSH terms were loaded.

The MEDLINE reload for 2005 is now available. For details enter HELP RLOAD at an arrow promt (=>). See also:

http://www.nlm.nih.gov/mesh/ http://www.nlm.nih.gov/pubs/techbull/nd04/nd04 mesh.html

OLDMEDLINE now back to 1950.

MEDLINE thesauri in the /CN, /CT, and /MN fields incorporate the MeSH 2005 vocabulary.

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FILE BIOSIS

FILE COVERS 1969 TO DATE.

CAS REGISTRY NUMBERS AND CHEMICAL NAMES (CNs) PRESENT FROM JANUARY 1969 TO DATE.

RECORDS LAST ADDED: 16 November 2005 (20051116/ED)

# FILE EMBASE

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FILE WPIDS

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DERWENT WORLD PATENTS INDEX SUBSCRIBER FILE, COVERS 1963 TO DATE

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FILE CONFSCI

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FILE JICST-EPLUS

FILE COVERS 1985 TO 21 NOV 2005 (20051121/ED)

THE JICST-EPLUS FILE HAS BEEN RELOADED TO REFLECT THE 1999 CONTROLLED TERM (/CT) THESAURUS RELOAD.

FILE JAPIO

FILE LAST UPDATED: 4 NOV 2005 <20051104/UP>
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FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 22 Nov 2005 (20051122/PD)
FILE LAST UPDATED: 22 Nov 2005 (20051122/ED)
HIGHEST GRANTED PATENT NUMBER: US6968571
HIGHEST APPLICATION PUBLICATION NUMBER: US2005257307
CA INDEXING IS CURRENT THROUGH 22 Nov 2005 (20051122/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 22 Nov 2005 (20051122/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Oct 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2005

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PRIOR APPLICATION NUMBER: US 60/223,525
PRIOR FILING DATE: 2000-08-07
NUMBER OF SEQ ID NOS-12
SOFTWARE: Patentin version 3.1
LENGTH: 1143 Query Match 93.8%; Best Local Similarity 99.6%; Matches 1130; Conservative j TYPE: PRT j ORGANISM: Mammalian US-09-924-154-14 781 607 667 727 841 127 301 421 481 541 601 661 721 61 67 181 121 셤 ઠે 8 셤 셤 ਠੇ ð

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